KEFI Gold and Copper

On the cusp

Updated mine plan, assumptions and valuation

Metals & mining

After a period of uncertainty, the peaceable conclusion of the recent general election in Ethiopia should provide KEFI with the opportunity to fund Tulu Kapi in an environment in which the Ethiopian government is keen to both encourage investment and generate tax and export earnings. Since our last note on the company, we have updated our project timings, costings and funding assumptions to come up with a valuation for KEFI of 4.35p/share (cf 4.05p/share previously), based largely upon its greater equity interest in the project (75% cf 45% previously) and notwithstanding its delayed start up.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/19	0.0	(3.5)	(0.6)	0.0	N/A	N/A
12/20	0.0	(2.8)	(0.2)	0.0	N/A	N/A
12/21e	0.0	(5.8)	(0.2)	0.0	N/A	N/A
12/22e	0.0	(8.0)	(0.3)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Evolution of capex, opex and funding assumptions

Although our capex and opex assumptions have increased since our last note (see pages 4–7) to reflect domestic Ethiopian inflation, in particular, they remain consistent with, and in the range of, previous estimates. In the meantime, whereas KEFI had previously expected to fund the Tulu Kapi project with US$58m in project level equity, this source of funding has now been reduced to US$25m but has been replaced by up to US$59m in convertible instruments (convertible at KEFI's discretion at market prices prevailing at the time of the conversion) plus an assumed US$11m in parent company equity (see Exhibit 5).

Hawiah developing rapidly

Following completion of a preliminary economic assessment and successful subsequent drilling at Hawiah, KEFI has commenced work on a pre-feasibility study for completion in Q222, followed by a mining licence application in mid-2022 and a potential start to development in 2023.

Valuation: 4.35p/share on enhanced project interest

We calculate that Tulu Kapi is capable of generating free cash flow of c £66.2m a year for seven years, from 2023 to 2029 (inclusive). This, in turn, drives average (maximum potential) dividends of 1.94p/share for the four years from 2026 to 2029 and values KEFI at 4.35p/share (cf 4.05p/share previously) fully diluted to account for an assumed US$11m parent company equity issue within the next nine months. This confirms a current value for KEFI of £93.7m or US$129.8m, based on Tulu Kapi alone. It reduces to 3.95p/share in the event that all convertible instruments are converted at our valuation of the shares in two to three years' time (see 'Sensitivities' on pages 14–15), once the mine has started production. However, it excludes any value for KEFI's portfolio of exploration assets, which we estimate could double its valuation to 8.79p/share.

6 July 2021

Price	**1.89p**
Market cap	**£41m**
	US$1.3865/£
Net cash (£m) end-December 2020	1.3
Shares in issue	2,152.9m
Free float	94.8%
Code	KEFI
Primary exchange	AIM
Secondary exchange	N/A

Share price performance

%	1m	3m	12m
Abs	0.4	(8.6)	74.6
Rel (local)	(0.8)	(14.0)	45.6
52-week high/low		2.62p	1.10p

Business description

KEFI Gold and Copper is an exploration and development company focused on gold and copper deposits in the highly prospective Arabian-Nubian Shield – principally the Tulu Kapi project in Ethiopia, as well as Hawiah Copper and Gold and Jibal Qutman Gold in Saudi Arabia.

Next events

Hawiah updated mineral resource	H221
Tulu Kapi commissioning	Late FY22
Tulu Kapi full production	Mid-FY23

Analyst

Charles Gibson +44 (0)20 3077 5724

mining@edisongroup.com

Edison profile page

KEFI Gold and Copper is a research client of Edison Investment Research Limited

Investment summary

Company description: Specialist Arabian-Nubian Shield miner

KEFI Gold and Copper is a gold junior that, to date, has specialised in discovery and acquisition on either side of the Arabian-Nubian Shield (ANS), which is the source of some of humankind's earliest known mining activities, including the Mahd adh Dhahab ('Cradle of Gold') mine. Currently, KEFI's flagship Tulu Kapi project (1.7Moz in resources) is Ethiopia's only 'ready-to-start' industrial mining project, located away from security hotspots and in a country on a continent that has been among the least affected by COVID-19. It also has 34% interests in its discoveries in Saudi Arabia, namely Jibal Qutman and Hawiah (together 2.3Moz AuE).

Valuation: Up 7.4% on updated assumptions and timings

In this note, we have updated our valuation to reflect higher capex and opex assumptions at Tulu Kapi and a delayed start-up, but with these factors offset by a higher level of project ownership owing to an updated funding structure entailing less project level equity and more convertible debt. In conclusion, we calculate that Tulu Kapi is capable of generating free cash flow of c £66.2m per year for seven years, from 2023 to 2029. With average (maximum potential) dividends of 1.94p/share for the four years from 2026 to 2029 (after deduction of a 25% minority interest), this implies a valuation for KEFI of 4.35p/share (cf 4.05p/share previously) when discounted back to FY21 at a rate of 10% per year. This valuation rises to a maximum of 6.49p/share in FY26 on the cusp of KEFI's first possible dividend payment once all debt has been repaid. However, it does not include any value for KEFI's pipeline of other exploration and development targets and, if it is successfully able to leverage its cash flow from Tulu Kapi into other assets in the region, we calculate that its valuation could double to 8.79p/share (note that even this would put KEFI on a P/E ratio of no more than 4.3x peak earnings). Included within this portfolio of other assets are Hawiah, which we estimate may have a standalone value in the range 0.32–5.54p per existing share, Jibal Qutman (0.54–3.33p/share) and Guji-Komto (0.86–3.00p/share).

Sensitivities: Pipeline potentially doubles 'base case' valuation

On average, a ±10% change in the gold price results in a 1.52p/share (34.9%) change in our valuation, while a ±10% change in costs results in a 0.99p/share (22.8%) change. At a flat, real gold price of US$1,778/oz (ie that currently prevailing), our 'base case' valuation rises by 38.6%, from 4.35p/share to 6.03p/share, in which case we calculate that an investor buying shares in KEFI on 1 January 2021 at a price of 1.894p could expect an internal rate of return of 29.7% over 10 years in sterling terms. Finally, we calculate that US$59m in charges and loans converted into equity at Edison's valuation of KEFI's shares in two to three years' time would dilute our 'base case' valuation by only 9.2%, to 3.95p/share.

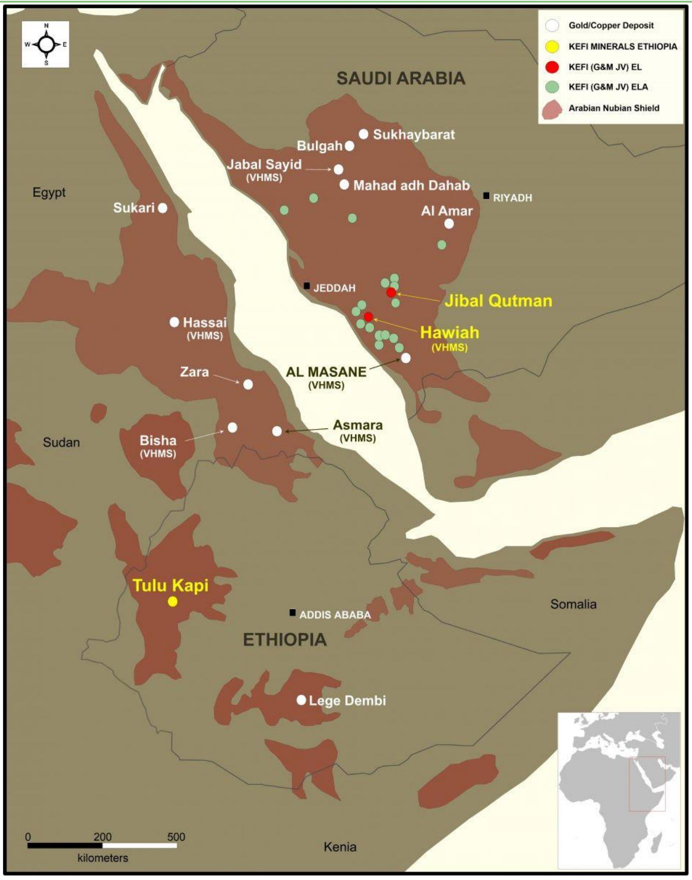
Financials: Funding lined up and ready to go

KEFI had £1.3m in net cash on its balance sheet as at 31 December 2020 and plans to finance its US$228.2m capex funding requirement principally via debt of US$155m, project-level equity of US$25m (excluding c US$60m in equity already invested), debt convertible into equity of US$59m (see pages 6-7 and 14-15) and parent company level equity of US$11m (see Exhibit 5 for detail). At its peak, we forecast a maximum net debt level of £142.0m, or US$196.8m in FY22.

Tulu Kapi and Hawiah projects

A map of the location of KEFI's principal assets on the ANS is as follows:

Exhibit 1: KEFI Gold and Copper assets on the Arabian-Nubian Shield



Source: KEFI Gold and Copper

Tulu Kapi

History

KEFI was formed in 2006 and rapidly evaluated and relinquished a number of exploration properties before focusing on the potential of the ANS in 2008, when it commenced exploration in Saudi Arabia. It expanded its activities in December 2013, when it acquired 75% of Tulu Kapi in Ethiopia for £4.5m, before buying the remaining 25% for US$0.75m plus 50m shares in September 2014.

KEFI completed an updated definitive feasibility study (DFS) on the Tulu Kapi project in July 2015 in collaboration with Senet, Golders, Epoch and Snowden. The DFS reflected both a complete overhaul and an independent validation of Tulu Kapi's geological resources and reserves, with KEFI inserting significant additional data and 'wireframing' each individual ore lode in the system. Thereafter, the project's plant construction and mining operation was put out to international tender and was, with the winning tenderers, further refined and optimised via joint value-engineering exercises. In general, while the mine plan remained unchanged, plant throughput increased to align the processing rate with the mining rate to avoid building up a large stockpile for post-mining processing. In May 2017, KEFI completed a 2017 DFS update that incorporated due diligence and all of the refinements since the 2015 DFS. Five months later, in October 2017, it then announced further increases to the planned throughput rate at Tulu Kapi, from 1.5–1.7Mtpa to 1.9–2.1Mtpa, thereby increasing production in the first three full years of operations by c 22%, from 115koz pa to 140koz pa (although total forecast gold production from the open pit over the life of the mine remained unchanged at c 980koz). Following independent expert reviews, it then released the results of the final Tulu Kapi project models, production plans and costings on 7 May 2018.

Mine schedule and opex

In preparing for contract execution and estimating contracted costs, KEFI has updated detailed mine engineering and planning for the bulk mining (>90%) and also for the selective mining (<10%) of its ore and waste, which has been built into contractually detailed schedules with its newly appointed mining contractor Corica (the largest in Africa). KEFI has focused intensively on this area, not only to reliably measure average grade, but also to manage grade variability during operations, based on tightly defined reserves derived from the wireframing of the entire ore system. Comparison between KEFI's current plans and those at the time of our last Outlook note (see Rose gold, published on 30 September 2020) show very little difference, other than timings, with commissioning now expected at end-2022 (to minimise election risk and other security issues and guarantee a safe start to construction) with the ramp-up to full production by mid-2023 and the life of processing operations therefore continuing into 2030 (cf 2029 previously) and updated costings.

Exhibit 2: Updated Tulu Kapi mine plan and cost assumptions

	2020	2021	2022	2023	2024	2025	2026	2027	2028
Current									
Waste (kt)			1,647	18,552	19,540	20,478	19,640	18,577	11,569
Stripping ratio			4.7	5.1	7.6	13.2	8.3	9.2	6.2
Ore processed (kt)			0	2,126	2,120	2,103	2,080	1,972	1,927
Grade (g/t)				2.54	2.31	1.96	2.43	2.10	2.14
Contained gold (koz)			0.0	173.9	157.4	132.6	162.6	133.3	132.8
Recovery (%)				94.79	93.00	91.36	93.81	92.02	92.07
Recovered gold (koz)			0.0	152.5	146.4	121.1	152.6	122.7	122.3
Operating costs (US$/t processed unless otherwise indicated)									
Mining (US$/t mined)*				3.97	3.86	3.54	3.47	3.55	4.25
Milling (oxide, US$/t)				9.68	9.68	9.68	9.68	9.68	9.68
Milling (fresh ore, US$/t)				8.26	8.26	8.26	8.26	8.26	8.26
Milling (hard ore, US$/t)				10.09	10.09	10.09	10.09	10.09	10.09
Total (US$/t)				55.77	54.32	51.31	51.19	52.78	45.70
Gold price (US$/oz)			1,819	1,749	1,681	1,617	1,554	1,524	1,524
Sustaining capex (US$000s)				11,761	5,039	2,436	3,636	1,769	1,773
Previous**									
Waste (kt)		1,647	18,552	19,540	20,478	19,640	18,577	11,569	4,954
Stripping ratio		4.7	5.1	7.6	13.2	8.3	9.2	6.2	4.7
Ore processed (kt)		0	2,126	2,120	2,103	2,080	1,972	1,927	1,955
Grade (g/t)			2.54	2.31	1.96	2.43	2.10	2.14	2.03
Contained gold (koz)		0.0	173.9	157.4	132.6	162.6	133.3	132.8	127.9
Recovery (%)		0.00	92.88	92.97	91.34	93.80	91.98	92.07	92.95
Recovered gold (koz)		0.0	161.5	146.3	121.1	152.6	122.7	122.2	118.9
Operating costs (US$/t processed unless otherwise indicated)									
Mining (US$/t mined)*			3.89	3.54	3.21	3.20	3.29	3.70	5.56
Milling (oxide, US$/t)			8.57	8.57	8.57	8.57	8.57	8.57	8.57
Milling (fresh ore, US$/t)			7.07	7.07	7.07	7.07	7.07	7.07	7.07
Milling (hard ore, US$/t)			8.62	8.62	8.62	8.62	8.62	8.62	8.62
Total (US$/t)			53.69	49.78	46.68	47.02	48.67	40.38	31.39
Gold price (US$/oz)		1,749	1,681	1,617	1,554	1,494	1,494	1,494	1,494
Sustaining capex (US$000s)			9,102	1,512	2,436	3,397	1,633	2,848	4,380

Source: KEFI Gold and Copper, Edison Investment Research. Note: *Includes waste. **See our note Final government approvals granted, published in June 2019.

In the case of costs, we estimate that unit mining costs have risen by an average of 8.4% over the course of the life of the mine relative to our prior assumptions, while oxide milling costs have risen by 13.0%, fresh milling costs have risen by 16.8% and hard, fresh milling costs have risen by 17.1%, largely due to general inflationary pressures in Ethiopia and (insufficient) foreign exchange moves to compensate. While not immaterial however, such cost increases are nevertheless generally less than those that would otherwise be implied by double-digit Ethiopian inflation figures over the past three years (notwithstanding the depreciation of the Ethiopian birr versus the US dollar):

Exhibit 3: Ethiopian inflation, forex rates and implied prices, 2018-present

Period	Inflation rate (%)	Indexed price	Ethiopian birr per US dollar (year end rate)	Indexed price in US dollars	Cumulative equivalent inflation in US dollars (%)
2021 (year to May)	19.7	189.8	43.40	4.37	18.8
2020	20.3	158.5	39.25	4.04	9.8
2019	15.8	131.8	32.08	4.11	11.7
2018	13.8	113.8	28.45	4.00	8.7
2017		100.0	27.15	3.68	

Source: Statista, Trading Economics

Note that direct comparison should not be made between sustaining capex estimates in the current mining schedule and the previous ones in Exhibit 2. In particular, the current schedule estimates a figure of US$2.5m in years FY25 and FY26 for a pebble crusher. This item was included in our estimates previously, but was designated as 'capex' rather than 'sustaining capex'. Excluding this factor, aggregate life of mine sustaining capex estimates in 2021 are 5.8% higher than they were in 2020.

As per KEFI's update of 9 November 2017, the proposed mining method and equipment specification are considered straightforward and technically sound by the lenders' independent technical expert. In this context, it is significant that less than 10% of the total material movement is categorised as 'selective' under the draft mining contract specifications, indicating that the mining methods to be used are generally very standardised.

Additional costs include a 7% mining royalty, US$8.7m in life-of-mine offsite costs (cf US$8.6m previously) and an US$11.2m provision for closure costs (cf US$10.0m previously). Onsite general and administrative costs are forecast to be US$8.6m pa during full mining and processing operations (cf US$7.1m previously) and US$4.3m pa while reprocessing stockpiles (cf US$3.6m previously). Head office costs are assumed to amount to £1.0m pa (unchanged). A carried-forward tax loss of US$60m (cf US$55m previously) has also been applied to future pre-tax profits before tax is payable.

Capex

A comparison of our updated capex expectations in June 2021 relative to those in May 2019, April 2018 and July 2017 is as follows:

Exhibit 4: Tulu Kapi estimated initial capex, July 2017, April 2018, May 2019 and June 2021					
(US$m unless otherwise indicated)	**2017 KEFI plan**	**Final project models**	**May 2019 estimates**	**June 2021 estimates**	**Change (%)**
	July 2017	**April 2018**	**May 2019**	**June 2021**	**June 2021 cf May 2019**
Mining	15.8	28.6	28.6	26.7	-6.6
Processing	75.9	100.1	100.1	111.8	+11.7
Infrastructure	15.7	15.7	15.7	20.0	+27.4
Tailings	18.7	14.9	14.9	32.3	+116.8
Indirect	1.8	0.0	0.0	1.8	N/A
Owner's costs	13.7	14.7	14.7	18.5	+25.9
Community relocation etc	10.0	13.5	13.5	23.0	+70.4
Environmental management	1.1	1.3	1.3	1.5	+15.4
Further contingency	3.3	12.7	3.3	0.0	-100.0
Other	(15.7)	(20.7)	(15.0)	(16.2)	+8.0
Additional funding-related costs	15.6	0.0	0.0	0.0	N/A
Subtotal	**155.8**	**180.7**	**177.1**	**219.4**	**+23.9**
Working capital	4.0	7.1	3.4	2.7	-20.6
Additional funds required for project funding	33.0	33.9	14.2	*6.1	-57.0
Cash buffer	0.0	17.7	0.0	0.0	N/A
Totals	**192.8**	**239.4**	**194.7**	**228.2**	**+17.2**
Assumed throughput rate (Mtpa)	1.7	1.9–2.1	1.9–2.1	1.9–2.1	-
Capital intensity (US$ per annual tonne)	**113.41**	**119.70**	**97.35**	**114.10**	**+17.2**

Source: Edison Investment Research, KEFI Gold and Copper. Note: *Lenders' upfront fees and other financing costs.

On the basis of these updated estimates, pre-production capex of US$219.4m equates to US$1,640 per annual average ounce of gold production at full capacity (cf US$1,401/oz previously).

Funding mix

One thing that has changed quite materially since our last note are the presumed sources of funding for the project's capex. KEFI's approach to its funding requirements has been consistent in seeking to share risk with contractors and to minimise dilution. During 2014 and 2015, it revised its inherited DFS as a precursor to opening project construction and mining to international tender, with the specific intent of reducing upfront capex by introducing contract mining. Since then, it has introduced project-level equity (eg the government of Ethiopia and a consortium of Ethiopian investors) as well as pursuing financing in the form of a US$160m bond. Whereas this bond had previously been assumed to account for the majority of KEFI's financing requirements however, it has now been replaced by senior secured debt. According to management, the bank loan proposal is more attractive and more straightforward to execute than the previous bond lease alternative. In addition, the proposed bank lenders are reported to be already working in Ethiopia, committed to the country and to be familiar with the local market and many of Tulu Kapi's stakeholders. Hence, it is considered to be more compatible with the project's consortium. Material savings are also expected in the cost of debt servicing, administration and other charges, especially during the project development and start-up period.

Including all exploration and corporate funding requirements, including pre-production interest, KEFI estimates that its initial financing requirement will be US$250m ±US$10m, which, for the purposes of financial modelling, Edison has assumed will be sourced as follows:

Exhibit 5: Tulu Kapi sources of funding

Item	Previous (June 2019)*		Previous (March 2020)**		Current	
	US$m	£m	US$m	£m	US$m	£m
Bond	160.0	124.9				
Senior secured debt	0.0	0.0	110.0-120.0	85.9-93.7	140.0	101.0
Subordinated debt linked to offtake rights					15.0	10.8
Ethiopian government participation at project level	20.0	15.6	20.0	15.6	20.0	14.4
Other project level equity*	38.0	29.7	38.0	29.7	5.0	3.6
Ore stockpile facility	10.0–20.0	7.8–15.6	17.7-27.7	13.8-21.6		
Mezzanine (eg streaming)	7.7	6.0				
Working capital convertible loan facility	5.1	4.0				
Subordinated loan convertible into KEFI equity after 3 yrs					45.0	32.5
Contractor charges convertible into KEFI equity after 2yrs					14.0	10.1
Sub-total	**240.8–250.8**	**188.0–195.8**	**185.7-207.7**	**145.0-160.6**	**239.0**	**172.4**
Parent company level equity	0	0	0	0	11.0	**7.9**
Total	**240.8–250.8**	**188.0–195.8**	**185.7-207.7**	**145.0-160.6**	**250.0**	**180.3**

Source: KEFI Gold and Copper, Edison Investment Research. Note: US$1.3865/£ (cf *US$1.2807/£ and **US$1.2808/£ previously); totals may not add up owing to rounding.

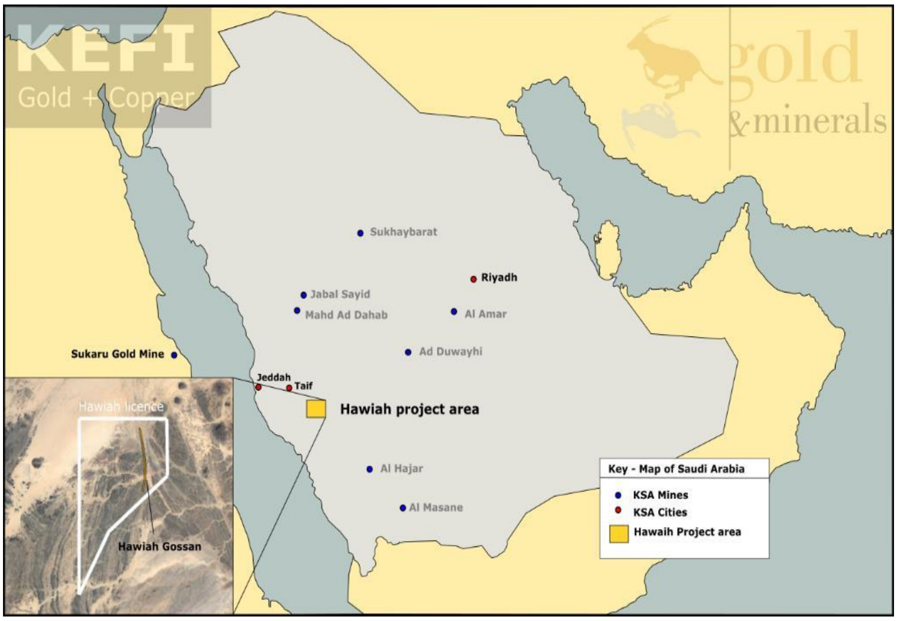
Of particular note is the US$33m reduction in the amount of funding being sourced via equity at the project level (which will leave KEFI owning a higher c 75–80% of the project directly, cf approximately 45% previously) and the US$17.7–27.7m reduction in funding via an ore stockpile/working capital facility compensated for by US$59m in funding via two items convertible into KEFI shares in two and three years' time. In both cases, conversion into KEFI equity is at KEFI's discretion at the price of KEFI's equity at the time of conversion, rather than at a pre-arranged price or a discount (NB the consequences of these changes are considered in the 'Valuation' and 'Sensitivities' sections of the note, below).

Otherwise, the government's policy directive requiring a maximum 50% debt gearing (defined as debt/[debt+equity]) for new projects has been waived in the case of Tulu Kapi, which has prior approval to expand the debt portion of its funding requirement to 70% of the total. In addition, clarification received from the regulator (the National Bank of Ethiopia) indicates that historical exploration spend on the project of c US$60m is considered to contribute towards equity for the purposes of this calculation.

Hawiah

The 95km^2 Hawiah exploration licence is located in the south-west of the Arabian Shield on the 120km Wadi Bidah Volcanogenic Mineral belt. The Wadi Bidah belt is almost three times as long as the Bisha belt in Eritrea (see Nevsun) and is almost unique among the world's volcanogenic massive sulphide (VMS) belts in that it remains, to all intents and purposes, unexplored.

Exhibit 6: Hawiah location



Source: KEFI Gold and Copper

Maiden resource estimate and PEA

KEFI announced a maiden mineral resource at Hawiah on 19 August 2020.

Exhibit 7: Hawiah* maiden mineral resource estimate

Material type	Category	Tonnage (kt)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Zn (kt)	Au (koz)	Ag (oz)
Oxide, open pit	Inferred	0.1	0.1	0.03	1.7	3.9	0.1	0.04	7	16
Transition, underground	Inferred	2.0	1.1	0.8	0.7	12.0	21	16	45	763
Fresh, underground	Inferred	17.2	0.9	0.8	0.5	10.1	147	141	297	5,595
Total	**Inferred**	**19.3**	**0.9**	**0.8**	**0.6**	**10.3**	**168**	**157**	**349**	**6,373**

Source: Edison Investment Research, KEFI Gold and Copper. Note: *KEFI 34% beneficial interest; reported in accordance with the Australasian Code for the Reporting of Exploration Targets, Mineral Resources and Ore Reserves, The JORC Code (2012).

At prevailing metals prices (US$9,180/t Cu, US$2,837/t Zn, US$1,778/oz Au and US$25.86/oz Ag), the resource contains total metal to a value of US$2.8bn, or the equivalent of 302kt of contained copper or 1.6Moz of contained gold.

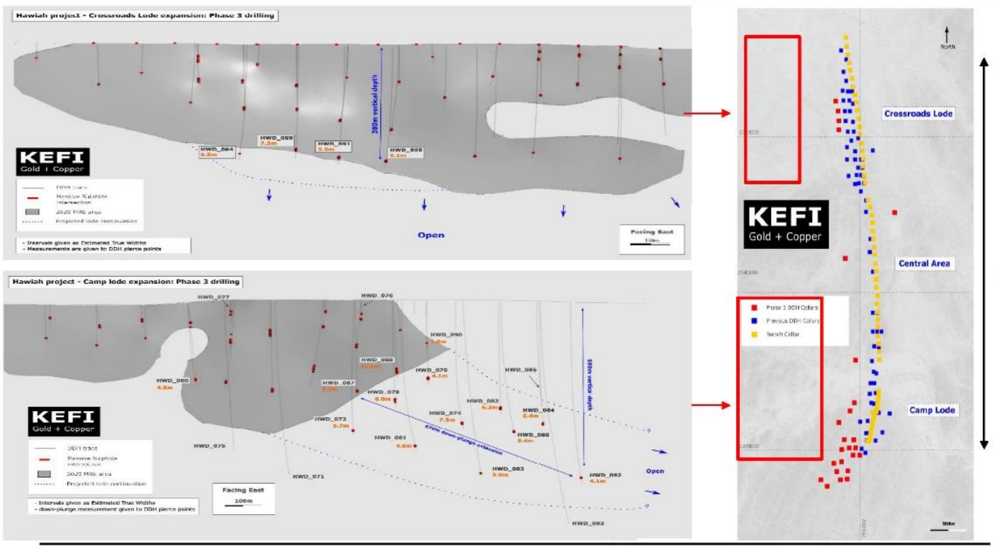
The entire deposit comprises three separate zones (see Exhibit 8), which may be summarised as follows:

- The 'Camp Lode': previously 1,200m long, but with the strike length now doubled relative to the 2020 mineral resource estimate and the total plunging strike extended by 670m down plunge to 1,200m, with an average true width of c 7m and confirmed to a depth of 590m below surface (cf 300m previously).
- The 'Crossroads Lode': 1,000m long, with an average true width of c 5m and now confirmed to a vertical depth of 380m below surface (cf 170m previously).
- The 'Crossroads Extension Lode': 800m long, but mineralisation now extended by an additional 110m and confirmed to a depth of 350m below surface at an average true width of c 5m.

In its most recent (third) phase of exploration, KEFI has confirmed that the Hawiah mineralisation remains open at depth, that the VMS style of mineralisation is continuously present directly beneath 4.5km (cf 4.0km previously) of gossanous ridgeline and that it is the source of an extensive and exceptionally strong geophysical anomaly. The massive sulphides intersected in its drill programme are reported to reflect a dominantly pyritic stratiform body containing a variable polymetallic blend of copper, zinc, gold and silver. Nevertheless, there remains considerable blue-sky potential at Hawiah. To date, the orebody has only been drilled to a vertical limit of 590m, but continues to remain open at depth. The down-dip continuation of the Camp Lode is of particular interest in this respect, where drilling results have reported grade and thickness increasing significantly with depth. Two of the deepest holes drilled (HWD_005 and HWD_059) have registered grades of 1.27% copper over a true width of 9m and 1.55% copper over a true width of 8.7m, respectively, and, if intersected in line with expectations, would extend mineralisation to a depth of c 800m and may indicate that resources are nearing the source (vent) of the VMS, where higher grade and thicker massive sulphides and stockwork-style mineralisation may typically be found. Geochemical analysis and volcaniclastic textures within the lodes have also indicated increasing proximity with depth to a potential primary feeder source.

In the meantime, drilling below the Central Zone (the 1,700m long area between the Crossroads and Camp lodes) has intersected mineralisation down to a depth of 580m (cf 80m previously) and confirmed its resource potential, as indicated by a strong induced polarisation (IP) anomaly. Finally, massive sulphides are reported to have been intersected in a drill hole 150m to the north of the Hawiah ridgeline, confirming that the mineralised horizon continues at depth even beyond the northern surface exposure in the 'Crossroads extension area'.

Exhibit 8: Hawiah project drilling and exploration



Source: KEFI Gold and Copper

Similar potential exists in the upper levels of the deposit, where the gossan portion of the mineralised zone is challenging to drill by virtue of the weathering patterns and the numerous cavity zones encountered. However, the French geological survey, Bureau de Recherches Géologique et Minières (BRGM), drilled these gossans in the 1980s, as a result of which it delineated a resource of 1.2Mt at a grade of 6.4g/t, containing 254koz gold, and management confirms that this oxidised portion of the deposit, which has demonstrated high levels of gold mineralisation, will also be further investigated.

Based on published literature, KEFI management believes that the Hawiah deposit is analogous to (albeit already bigger than) the Al Masane polymetallic VMS mine, which was the first mine in Saudi Arabia to export copper and zinc concentrates and has reported resources of 10.0Mt at grades of 1.1% copper, 4.8% zinc, 1.1g/t gold and 36g/t silver, and a similar metal composition and structural and geological settings. Note that the discovery of the stockwork zone that fed the structure now being drilled could also represent a potentially much larger bulk-mineable target analogous to the Jabal Sayid mine operated by Barrick to the north of Hawiah.

Hawiah PEA

The resource reported by KEFI in Exhibit 7 is the equivalent of 19.3Mt at a grade of 1.57% copper equivalent or 2.51g/t gold equivalent, such that each tonne of ore contains US$144 (cf US$119 previously) worth of combined metals at spot prices (see Exhibit 9).

On 22 September 2020, KEFI announced the results of a preliminary economic assessment (PEA) at Hawiah. The PEA was conducted by the KEFI planning team, supported by internationally recognised specialists, including SRK, and included technical analysis, high-level assessments and trade-off studies to establish the likely key components of the mine's potential development. Among other things, these included:

- Underground mining using long-hole open stoping, using rib and sill pillars for support.
- Processing via two-stage flotation to produce separate copper and zinc concentrates, with a cyanide leach circuit to allow for the production of gold doré from the zinc concentrate and tailings stream.
- Tailings storage and required infrastructure.

The full details of KEFI's PEA announcement may be found here. It was also the subject of Edison's report entitled *Rose gold*, published on 30 September 2020, and readers are directed towards this report for more details on Edison's approach to calculating a value for Hawiah and its assumptions in doing so. A brief comparison of the major differences between KEFI's and Edison's assumptions is as follows:

Exhibit 9: Comparison of KEFI and Edison assumptions regarding Hawiah cf spot prices

	KEFI assumption	Edison assumption	Spot prices
Metals prices			
Copper price (US$/t)	6,603	*6,410	9,180
Zinc price (US$/t)	2,315	*2,315	2,837
Gold price (US$/oz)	1,956	*1,524	1,778
Silver price (US$/oz)	27.50	*24.99	25.86
Other			
Sustaining capital expenditure	US$46m	Seven years at US$8m pa = US$56m	N/A

Source: KEFI Gold and Copper, Edison Investment Research. Note: *Long-term real prices.

Readers should note that Edison has revised its long-term prices of gold and silver very fractionally higher relative to our last note, to reflect the passage of time and inflation – that is to say, our real gold price assumption is now US$1,524/oz in 2021 money terms (cf US$1,494/oz in 2020 money terms previously), while our silver price is US$24.99/oz (cf US$24.53/oz previously).

In its PEA, KEFI considers a 'base case' scenario in which the mine operates at a throughput rate of 2.0Mtpa for seven years and an 'extended' scenario in which it operates for a further 10 years 'at the average grade of the Camp Lode below the 1070m RL elevation'. On the basis of these assumptions, the updated financial outcomes generated by Edison from its model compare with those generated by KEFI as shown in Exhibit 10. In addition, we have also shown equivalent outcomes in the event that the current spot prices of metals (see Exhibit 9) prevail over the entire course of Hawiah's mine life in real terms:

Exhibit 10: KEFI versus Edison financial model outcomes

Extended mine life scenario				Scenario	Base case scenario			
KEFI	Edison	Edison	Edison	Model	KEFI	Edison	Edison	Edison
KEFI	KEFI	Edison	Spot	Assumptions	KEFI	KEFI	Edison	Spot
	2.0	2.0	2.0	Ore processing rate (Mtpa)	2.0	2.0	2.0	2.0
	17	17	17	Life of mine (years)	7	7	7	7
	78	78	78	Average annual operating costs (US$m)	79	78	78	78
	155.5	142.6	194.3	Average annual revenue (US$m)	153	155.5	142.6	194.3
	86	86	86	Average annual all-in sustaining costs (US$m)	85	86	86	86
	69.5	56.6	108.3	Annual steady-state net pre-tax free cash flow (US$m)	67	69.5	56.6	108.3
*362	*311.3	166.1	497.6	Post-tax NPV (US$m)	*96	*99.8	28.3	229.5
28	26.6	21.5	41.2	Post-tax IRR (%)	22	20	13.7	37.0
	222	222	222	Pre-production capital expenditure (US$m)	222	222	222	222
123.1	105.9	56.5	169.2	34% KEFI share of post-tax NPV (US$m)	32.6	33.9	9.6	78.0
5.72	4.92	2.62	7.86	Ditto (US cents per share)	1.51	1.58	0.45	3.62
4.03	3.46	1.85	5.54	Ditto (pence per share)	1.07	1.11	0.32	2.55

Source: Edison Investment Research, KEFI Gold and Copper. Note: *NPV calculation conducted at an 8% discount rate; otherwise, all other NPV's conducted at a 10% discount rate.

Several features of these outcomes are noteworthy:

- The similarity between the outputs of the KEFI model and the Edison model using KEFI assumptions for the 'base case' scenario, which confers confidence upon Edison's financial model relative to KEFI's.
- For the 'extended mine life' scenario, the difference between the net present value (NPV) of the KEFI model and the Edison model using KEFI assumptions is 14.0% (US$311.3m cf US$362m), which we regard as being an acceptable variance within the context of a PEA in which the operating and capital cost estimates are made to a ±50% level of accuracy.
- The sharp increases in the values attained using spot prices compared with long-term prices.

In consequence and owing to the tabular and continuous nature of the mineralisation, KEFI anticipates that Hawiah can be advanced to a development decision quickly and at relatively low cost. In particular, if the resource can be expanded to make the 'extended mine life scenario' a reality, then KEFI expects that 75% of the project funding could be eligible for debt finance, thereby increasing the project's (leveraged) post-tax internal rate of return (IRR) to in excess of 50%.

Next steps at Hawiah

Following completion of the PEA and successful subsequent drilling, KEFI has commenced work on a pre-feasibility study (PFS), which is scheduled completion in Q222 followed by a mining licence application in mid-2022 and a potential start to development in 2023. With this in mind, its immediate priorities towards Hawiah are now as follows:

- Seeking to double the maiden mineral resource estimate upon completion of Phase 4 of the drilling campaign (which has already commenced) in H221.
- Completing necessary baseline studies (eg metallurgical) for the PFS.
- Extending exploration activities into the surrounding district as licensing warrants (eg the Al Godeyer exploration licence).

To these ends, the directors of KEFI's joint venture company in Saudi Arabia, G&M, have resolved to trigger the next stage of the project, comprising:

- Deeper, Phase 4 drilling with a target of doubling the maiden resource.
- Infill drilling to upgrade the existing resources into the indicated category, so as to fully justify mine planning and the estimation of a maiden ore reserve.

- Scout drilling for a large stockwork, or 'feeder', zone to the massive sulphides already identified (note that this represents a separate, and probably much larger-scale, target than the existing Hawiah resource).

Recent developments

Since our last Outlook note (*Rose gold*, published on 30 September 2020), KEFI has raised equity via one placing in November to raise £3m plus a number of smaller warrant issues such that the number of shares currently in issue is 2,152.9m, representing a 15.3% increase relative to the 1,867.1m that were in issue at the time of our earlier note.

As discussed previously, for the purposes of our valuation of the company, we have assumed that KEFI will raise an additional US$11m (£7.9m) in equity at the prevailing share price of 1.894p in late FY21/early FY22 in order to complete the funding of Tulu Kapi (see Exhibit 5 on page 7).

Valuation

Project

At a long-term gold price of US$1,400/oz , KEFI calculates an updated project value for Tulu Kapi (on a 100% basis) of US$184m (see slide 7 of the company's 27 April 2021 presentation) – a 22.0% decline relative to the US$236m that it calculated in May 2020, reflecting, in particular, the increased costs discussed previously. Whereas KEFI's financing arrangements in May last year indicated an ultimate beneficial interest in the Tulu Kapi project of 45% however, its current financing arrangements indicate a materially larger 75% interest (given that much less of the overall funding is now being financed via equity at the project level). Significantly however, the larger interest in the smaller NPV translates into a higher value per share for each of the three gold prices shown in the table below notwithstanding the increase in the number of shares in issue in the intervening timeframe:

Exhibit 11: KEFI project-based valuations of Tulu Kapi at varying gold prices

Gold price (US$/oz)	1,400	1,700	2,000
Previous			
NPV_8*			
US dollars (millions)	236	422	607
Pounds sterling (millions)	189	337	485
NPV_8 (45% basis)			
US dollars (millions)	105	180	273
Pounds sterling (millions)	85	152	218
NPV_8 (45% basis)			
US cents per share	5.62	9.64	14.62
Pence per share	4.55	8.14	11.68
Current			
NPV_8*			
US dollars (millions)	184	355	523
Pounds sterling (millions)	133	257	379
NPV_8 (75% basis)			
US dollars (millions)	138	266	392
Pounds sterling (millions)	100	193	284
NPV_8 (75% basis)			
US cents per share	6.41	12.37	18.22
Pence per share	4.63	8.95	13.20

Source: KEFI Gold and Copper, Edison Investment Research (per share data). Note: *100% basis; US dollars converted into pounds sterling at a rate of US$1.38/£.

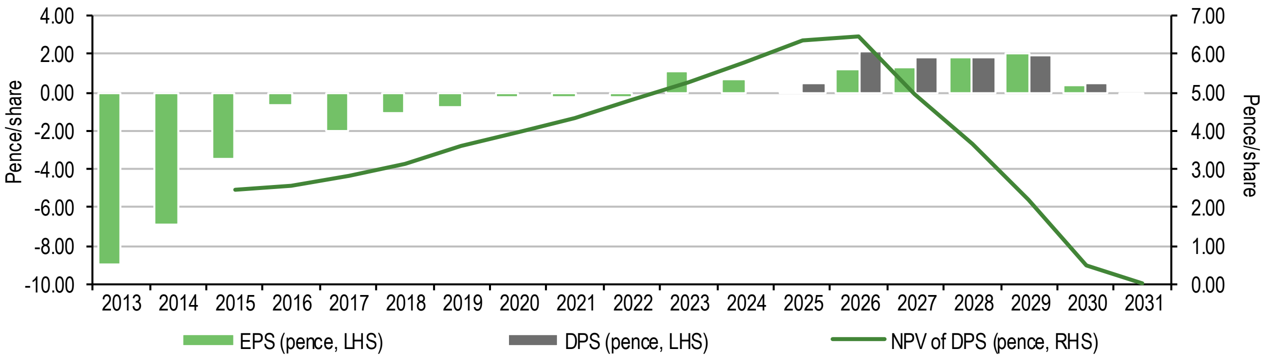
Observing the almost perfect, straight-line relationship between the gold price and the NPV calculated by KEFI, Edison calculates that a long-term gold price of US$1,524/oz implies an NPV_8 of the Tulu Kapi project of US$191m or £138m (75% interest), or 8.87 US cents or 6.43p per share.

In our report Gold stars and black holes, published in January 2019, we calculated a mean enterprise value for companies with projects at the DFS stage of development of 30.9% of project NPV, ranging up to 133.5%. At Edison's long-term gold price of US$1,524/oz, this alone would imply a pre-funding valuation for KEFI of 1.99p/share (excluding cash) and a maximum pre-funding valuation of 8.58p/share.

Company

On the basis of long-term price assumptions, we calculate that Tulu Kapi is capable of generating free cash flow of c £66.2m per year (cf £65.2m previously) for seven years, from 2023 to 2029 (inclusive). With average (maximum potential) dividends of 1.94p/share (cf 1.62p/share previously) for the four years from 2026 to 2029 inclusive (after deduction of a 25% minority interest), this implies a valuation for KEFI of 4.35p/share (cf 4.05p/share previously) when discounted back to FY21 at a rate of 10% per year. This valuation then rises to a maximum of 6.49p/share (5.62p/share previously) in FY26 on the cusp of KEFI's first possible dividend payment once all debt has been repaid:

Exhibit 12: Edison estimate of life of mine KEFI EPS and maximum potential DPS (pence/share), FY13–31e



Source: Edison Investment Research

Note, however, that this valuation does not ascribe any value to KEFI's pipeline of exploration and development targets (see below). If KEFI is successfully able to leverage its cash flow from Tulu Kapi into other assets in the region, then our updated valuation of 4.35p/share rises to 8.79p/share (note that even this would put KEFI on a peak P/E ratio of no more than 4.3x, which hardly appears excessive).

On this basis alone, we estimate that an investment in KEFI shares on 1 January 2021 at a price of 1.894p could generate an internal rate of return for investors of 23.5% over the 10 years to 2030 (fully diluted) in sterling terms.

To this may then be added 0.32–5.54p/share in value for Hawiah (see Exhibit 10) plus the value of a range of other 'next level' assets, discussed briefly in the section entitled 'Exploration potential', below.

Sensitivities

Our base case discounted dividend flow valuation of 4.35p is inherently dependent on our gold price assumptions, cash costs, the discount rate, the price at which a future, assumed US$11.0m equity raise is conducted and the prices at which up to US$59m in charges and loans (see Exhibit 5) are converted into equity in two to three years' time. Each of these 'sensitivities' is considered in turn, below.

Exhibit 13: Discounted dividend valuation sensitivity to gold prices and costs

Valuation (pence per share)		Gold price				
		-20%	-10%	Base case	+10%	+20%
	+20%	0.00	0.91	2.38	3.87	5.38
	+10%	0.37	1.87	3.36	4.87	6.39
Cash costs	Base case	1.31	2.84	**4.35**	5.87	7.40
	-10%	2.28	3.83	5.35	6.88	8.41
	-20%	3.26	4.82	6.36	7.89	9.42

Source: Edison Investment Research

On average it can be seen that a ±10% change in the gold price results in a 1.52p/share change in our valuation, while a ±10% change in costs results in a 0.99p/share change. At a flat, real gold price of US$1,778/oz (ie that currently prevailing – see Exhibit 9), our 'base case' valuation rises by 38.6%, from 4.35p/share to 6.03p/share and the IRR that an investor could expect to earn by 6.2 percentage points from 23.5% to 29.7%.

Exhibit 14: Discounted dividend valuation sensitivity to discount rate (pence/share)

Discount rate (%)	0%	5%	10%	15%	20%	25%	30%
Valuation (pence)	8.79	6.12	**4.35**	3.16	2.33	1.74	1.32

Source: Edison Investment Research

Note that these results are consistent with our calculation of an internal rate of return of 23.5% over 10 years in sterling terms for investors buying KEFI shares at a price of 1.894p on 1 January 2021 (under Exhibit 12, above).

Exhibit 15: Discounted dividend valuation sensitivity to future equity raising price (pence)

Price (pence)	0.90	1.20	1.50	1.80	1.894	2.10	2.40	2.70	3.00	4.82
Valuation (pence/share)	3.70	3.98	4.18	4.34	**4.35**	4.42	4.51	4.57	4.63	4.82

Source: Edison Investment Research

Finally, we calculate that US$59m in charges and loans converted into equity at Edison's valuation of KEFI's shares in two to three years' time (see Exhibit 5) would result in a valuation of 3.95p/share.

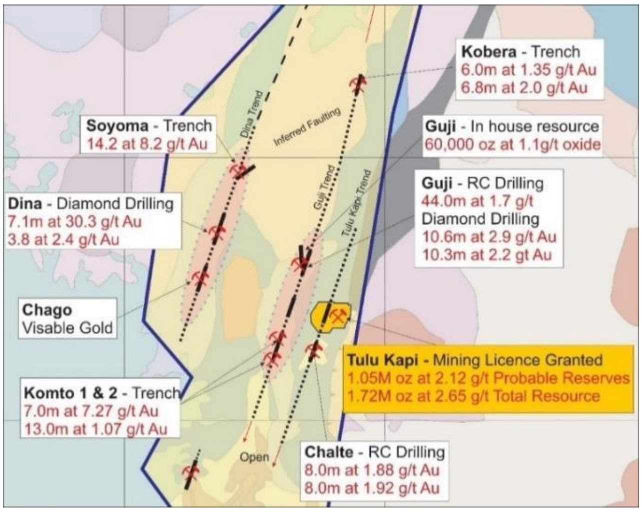
Exploration potential

In addition to Hawiah and Tulu Kapi, KEFI has a number of other assets that we estimate could add a further c 1.94–8.78c (1.40–6.33p) in value to its shares, which are summarised below.

Guji-Komto (parallel to Tulu Kapi)

An area of over 1,000km^2 adjacent to Tulu Kapi has been reserved for exploration by KEFI upon commencement of development, with a view to adding satellite deposits to development and production plans. Within this, KEFI has one immediate, major exploration target, being the Guji-Komto belt, which is a parallel structure to Tulu Kapi.

Exhibit 16: Map of Tulu Kapi and surrounding exploration targets



Source: KEFI Gold and Copper

The Guji-Komto belt represents a series of old gold workings on a parallel strike to Tulu Kapi extending continuously for over 9km to the west of the Tulu Kapi pit. The most extensive historical workings are located at the Komto 1 prospect. At 1.3–1.5g/t in-situ, the grade of this mineralisation was considered too low to be included in the development plan for the Tulu Kapi mine. However, impressive widths and their oxide nature potentially qualify it as the basis of an incremental heap leach operation via the exploitation of a series of open pits. Preliminary estimates by management indicate that c 250koz of gold could be amenable to exploitation, with low-grade material being directed to heap leach pads and high-grade material to the carbon-in-leach (CIL) plant at Tulu Kapi. Such an operation, based on preliminary management estimates, could produce c 40koz gold a year over five years for a relatively small incremental capital outlay of c US$30m (on account of infrastructure already being in place to service Tulu Kapi) and could have an NPV in the order of US$26–47m at the gold prices shown below (note that these are illustrative numbers only and are subject to the results of future exploration and development studies):

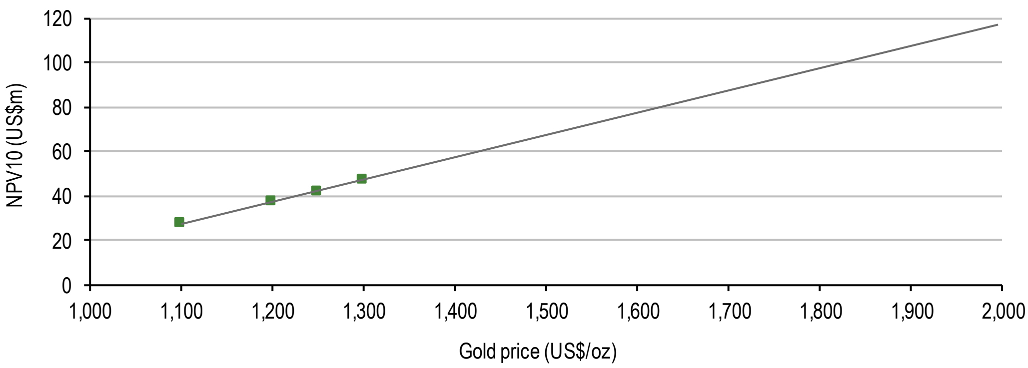
Exhibit 17: Guji-Komto indicative valuations

Gold price (US$/oz)	1,100	1,200	1,250	1,300
NPV_{10} (US$m)	26.9	36.8	41.8	46.8
NPV_{10} per KEFI share (US cents)*	1.19	1.62	1.84	2.07
IRR (%)	45	57	63	69

Source: KEFI management estimates, Edison Investment Research. Note: *Based on existing number of shares in issue and assumed 95% ownership.

The gold price range over which valuations were conducted indicates that these calculations were performed in the 2013–18 gold price environment. While the following analysis – comparing the calculated NPV_{10} with the gold price – is presented with a number of caveats (in particular that cost assumptions remain unchanged), it nevertheless serves to demonstrate that, at a gold price of US$1,524/oz, Guji-Komto could be worth in the order of US$69.1m (or 3.05 US cents per existing KEFI share) or potentially as much as US$94.3m (or 4.16 US cents per existing KEFI share) at a flat, long-term, real gold price of US$1,778/oz.

Exhibit 18: Guji-Komto NPV_{10} (US$m) vs (real) gold price (US$/oz)



Source: Edison Investment Research (underlying data KEFI Gold and Copper)

Jibal Qutman

Jibal Qutman is a mesothermal, or orogenic, quartz vein hosted gold deposit located in the Asir Terrane (see Exhibits 1 and 6). It comprises four licences covering c 100km^2 of the Nabitah-Tathlith fault zone, which is a 300km-long structure with multiple outcrops at surface, along which BRGM mapped over 40 mineral occurrences and/or ancient mines. G&M was granted the Jibal Qutman exploration licence in June 2013 and has subsequently lodged a mining licence application.

Gold mineralisation at Jibal Qutman itself is hosted in a series of quartz veins in six separate ore bodies, dipping to the east at an angle of c 45°, surrounded by parallel veins that form stringer zones around them. The deposit has now been drilled out and the sulphide portion of the resource found to be refractory on account of the presence of carbon. As a result, KEFI has focused its exploration activities on the oxide portion of the resource and delineated a potential mineable resource of 6.6Mt at a grade of 0.95g/t (cf grades of c 0.8g/t at comparable, nearby assets), containing c 200koz gold (out of a total oxide resource of 287koz – see Exhibit 19, below), at a stripping ratio of 2.2x.

Exhibit 19: Jibal Qutman mineral resource estimate

Jibal Qutman		Tonnes (Mt)	Grade (g/t)	Contained gold (koz)
Oxide	Measured	0.00	0.00	0
	Indicated	8.30	0.86	229
	Inferred	2.80	0.64	58
	Sub-Total	**11.10**	**0.80**	**287**
Sulphide	Measured	0.00	0.00	0
	Indicated	9.70	0.86	269
	Inferred	7.60	0.72	176
	Sub-Total	**17.30**	**0.80**	**446**
Total	**Measured**	**0.00**	**0.00**	**0**
	Indicated	**18.00**	**0.86**	**498**
	Inferred	**10.40**	**0.70**	**235**
	Total	**28.40**	**0.80**	**733**

Source: KEFI Gold and Copper.

Column leach tests conducted by metallurgical consultants ALS indicated gold recoveries of c 73%, as a result of which KEFI envisages developing the area via a string of pits mining oxidised material for heap leach processing.

In May 2015, a PEA on the deposit was completed on the basis of a 1.5Mtpa heap leach operation, producing 139koz gold over an initial 4.5-year mine life (average 30.9koz pa) at an average metallurgical recovery of 69% and capex and opex of US$30m and US$597/oz, respectively. A summary of the results of the PEA is provided in the table below for both the existing resource and a potentially trebled resource. In addition to the formal results, which are shown for gold prices of US$1,150/oz and US$1,300/oz, Edison has also included its estimates of the same results at long-term, flat, real gold prices of US$1,524/oz and US$1,778/oz, using the same methodology – and with the same caveats – as adopted in Exhibit 18:

Exhibit 20: Jibal Qutman May 2015 PEA results (plus Edison pro rata estimates)

	Existing resource				Trebled resource			
Gold price (US$/oz)	**1,150**	**1,300**	**1,524**	**1778**	**1,250**	**1,300**	**1,524**	**1,778**
NPV_5 (US$m)	47.7	64.3	89.1	117.2	145	159	221.7	292.8
NPV_5 per KEFI share (US cents)*	0.75	1.02	1.41	1.85	2.29	2.51	3.50	4.62
IRR (%)	41	52			25	30		

Source: KEFI Gold and Copper, Edison Investment Research. Note: *Based on existing number of shares in issue and 34% attributable ownership.

In due course, it is anticipated that the addition of adjoining licences could support a proportionally larger production base using a modular development model (eg 2–4x that currently assessed).

In the immediate future, KEFI's objectives at Jibal Qutman include tenure confirmation under the new mining regulations via the grant of a mining licence, completion of a pre-feasibility study and investigating the potential to develop heap leach operations to fund construction of a CIL processing plant for the deeper (refractory) sulphide ore.

Financials

KEFI had £1.3m in net cash on its balance sheet as at 31 December 2020 (cf £2.1m as at 30 June 2020 and £0.8m in net debt as at 31 December 2019), after £6.4m in operating and investing cash outflows before working capital (cf £5.3m in FY19, £6.9m in FY18 and £6.2m in FY17) and after having raised £7.3m over the course of the 12-month period.

As stated previously, KEFI now plans to finance its US$228.2m capex funding requirement principally via debt of US$155m, project-level equity of US$25m (excluding c US$60m in equity already invested), debt convertible into equity of US$59m and parent company level equity of

US$11m. On this basis, we forecast a maximum net debt funding requirement overall of £142.0m, or US$196.8m in FY22 (see Exhibit 21, below). Obviously, raising funds of this order of magnitude is not without risk for a company with a market capitalisation of £41m. However, we believe that this risk is mitigated by the fact that a preliminary term sheet regarding the terms of KEFI's bank loan has already been signed and is subject now only to credit approval. The bank loan proposal is said to be more attractive and more straightforward to execute than the previous bond lease alternative. In addition, the proposed bank lenders are reported to be already working in Ethiopia and to be familiar with the local market and many of Tulu Kapi's stakeholders. Hence, it is considered to be more compatible with the project's consortium. Full finance close and drawdown is therefore anticipated soon after the end of June's general election. In addition, material savings are expected in the cost of debt servicing, administration and other charges, especially during the project development and start-up period. Among other things, this change in funding structure reflects the fact that Ethiopia is now back on bankers' radar screens having lifted its state of emergency and having delivered rapid and positive reforms since then. Overall, KEFI management considers the banking proposal to be more conventional than the bond lease alternative, with the added benefit that it is with parties committed to Ethiopia.

Exhibit 21: Financial summary

£'000s	2013	2014	2015	2016	2017	2018	2019	2020	2021e	2022e
Year end 31 December	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS										
Revenue	0	0	0	0	0	0	0	0	0	0
Cost of Sales	(927)	(2,071)	(1,634)	(2,260)	(3,522)	(4,145)	(2,357)	(2,663)	(1,361)	(1,361)
Gross Profit	(927)	(2,071)	(1,634)	(2,260)	(3,522)	(4,145)	(2,357)	(2,663)	(1,361)	(1,361)
EBITDA	(927)	(2,071)	(1,634)	(2,260)	(3,522)	(4,145)	(2,357)	(2,663)	(1,361)	(1,361)
Operating Profit (before amort. and except.)	(927)	(2,189)	(1,724)	(2,315)	(3,546)	(4,155)	(2,367)	(2,706)	(1,396)	(1,396)
Intangible Amortisation	0	0	0	0	0	0	0	0	0	0
Exceptionals	(442)	(379)	(428)	1,944	(2,359)	(180)	(1,465)	174	0	0
Other	0	0	0	0	0	0	0	0	0	0
Operating Profit	(1,369)	(2,568)	(2,152)	(371)	(5,905)	(4,335)	(3,832)	(2,532)	(1,396)	(1,396)
Net Interest	4	(413)	(319)	(136)	(75)	(459)	(1,150)	(100)	(4,380)	(6,575)
Profit Before Tax (norm)	(923)	(2,602)	(2,043)	(2,451)	(3,621)	(4,614)	(3,517)	(2,806)	(5,775)	(7,970)
Profit Before Tax (FRS 3)	(1,365)	(2,981)	(2,471)	(507)	(5,980)	(4,794)	(4,982)	(2,632)	(5,775)	(7,970)
Tax	0	0	0	0	0	0	0	0	0	0
Profit After Tax (norm)	(923)	(2,602)	(2,043)	(2,451)	(3,621)	(4,614)	(3,517)	(2,806)	(5,775)	(7,970)
Profit After Tax (FRS 3)	(1,365)	(2,981)	(2,471)	(507)	(5,980)	(4,794)	(4,982)	(2,632)	(5,775)	(7,970)
Minority interests	0	115	0	0	0	0	0	0	1,444	1,993
Net income (normalised)	(2,151)	(3,469)	(2,778)	(3,177)	(3,907)	(4,775)	(4,108)	(3,894)	(4,332)	(5,978)
Net income (FRS3)	(1,365)	(2,866)	(2,471)	(507)	(5,980)	(4,794)	(4,982)	(2,632)	(4,332)	(5,978)
Average Number of Shares Outstanding (m)	29.0	56.0	92.8	194.9	315.3	476.1	719.0	1,663.2	2,145.4	2,362.4
EPS - normalised (p)	(7.4)	(6.2)	(3.0)	(1.6)	(1.2)	(1.0)	(0.6)	(0.2)	(0.2)	(0.3)
EPS - normalised and fully diluted (p)	(7.4)	(6.2)	(3.0)	(1.5)	(1.1)	(0.9)	(0.5)	(0.2)	(0.2)	(0.2)
EPS - (IFRS) (p)	(4.7)	(5.1)	(2.7)	(0.3)	(1.9)	(1.0)	(0.7)	(0.2)	(0.2)	(0.3)
Dividend per share (p)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)	-	-	-	-	-	-	-	-	-	-
EBITDA Margin (%)	-	-	-	-	-	-	-	-	-	-
Operating Margin (before GW and except.) (%)	-	-	-	-	-	-	-	-	-	-
BALANCE SHEET										
Fixed Assets	7,152	9,299	11,926	14,053	16,275	18,795	21,239	24,545	113,393	182,709
Intangible Assets	6,900	9,139	11,845	13,992	16,232	18,757	21,200	24,510	24,510	24,510
Tangible Assets	252	160	81	61	43	38	39	35	88,883	158,199
Investments	0	0	0	0	0	0	0	0	0	0
Current Assets	4,014	1,061	1,012	3,561	1,047	284	1,454	1,817	1,254	1,629
Stocks	0	0	0	0	0	0	0	0	0	0
Debtors	655	335	358	3,056	94	115	1,234	448	1,200	1,575
Cash	3,279	640	562	410	466	88	150	1,315	0	0
Other	80	86	92	95	487	81	70	54	54	54
Current Liabilities	(3,363)	(3,202)	(1,995)	(2,067)	(2,852)	(3,727)	(5,211)	(3,125)	(6,014)	(7,458)
Creditors	(3,363)	(3,202)	(1,995)	(2,067)	(2,852)	(3,112)	(4,247)	(3,125)	(6,014)	(7,458)
Short term borrowings	0	0	0	0	0	(615)	(964)	0	0	0
Long Term Liabilities	0	0	0	0	0	0	0	0	(73,050)	(141,969)
Long term borrowings	0	0	0	0	0	0	0	0	(73,050)	(141,969)
Other long term liabilities	0	0	0	0	0	0	0	0	0	0
Net Assets	7,803	7,158	10,943	15,547	14,470	15,352	17,482	23,237	35,582	34,911
CASH FLOW										
Operating Cash Flow	(1,424)	(2,006)	(2,729)	(2,211)	(51)	(3,291)	(624)	(2,092)	777	(292)
Net Interest	4	(413)	(319)	(136)	(75)	115	(1,150)	(100)	(4,380)	(6,575)
Tax	0	0	0	0	0	0	0	0	0	0
Capex	(877)	(3,133)	(3,507)	(3,014)	(2,625)	(2,835)	(2,690)	(4,389)	(88,883)	(69,351)
Acquisitions/disposals	(1,083)	(750)	0	16	0	0	0	0	0	0
Financing	4,735	3,663	6,480	5,192	2,807	5,128	1,640	6,996	18,121	7,299
Dividends	0	0	0	0	0	0	0	0	0	0
Net Cash Flow	1,355	(2,639)	(75)	(153)	56	(883)	(2,824)	415	(74,365)	(68,919)
Opening net debt/(cash)	(1,924)	(3,279)	(640)	(562)	(410)	(466)	527	814	(1,315)	73,050
HP finance leases initiated	0	0	0	0	0	0	0	0	0	0
Other	0	0	(3)	1	0	(110)	2,537	1,714	0	0
Closing net debt/(cash)	(3,279)	(640)	(562)	(410)	(466)	527	814	(1,315)	73,050	141,969

Source: company sources, Edison Investment Research. Note: Differences between Edison Financial summary and KEFI's reported income statement may be attributed to the treatment of the 'Share of loss from jointly controlled entity'.

Contact details	Revenue by geography
Wisdom Tower, 1st Floor, 2 Ayiou Pavlou & Kadmou Street, Nicosia, Cyprus 1105 +357 22 25 61 61 KEFI-minerals.com	N/A

Management team

Executive chairman: Harry Anagnostaras-Adams	Head of operations: David Munro
Harry Anagnostaras-Adams qualified as a chartered accountant while working with PricewaterhouseCoopers and has an MBA from the Australian Graduate School of Management. He has overseen a number of business start-ups, both in the mining industry (eg KEFI and EMED Mining) and outside (eg Citicorp Capital Investors, Pilatus Capital and Cyprus-based Semarang Enterprises) in the capacity of chairman, deputy chairman and managing director.	David Munro has been in the metals and mining industry since 1977. He joined Gencor in 1981 and served variously as its executive director of new business and trading, MD of Billiton International, general manager of Samancor, vice president of strategy & business development, chief development officer and executive director of Aluminium. Since leaving BHP Billiton, other positions held include strategy director and executive officer of Kazakhmys and group CEO of CEMEX.
Adviser – exploration strategy: Jeff Rayner	**Finance Director: John Leach**
Jeff Rayner is a geologist with more than 25 years' experience in gold exploration and mining in Australia, Europe and Asia. He started his career in Australia with BHP Gold and later Newcrest Mining. He was involved in the early exploration discovery of the Cracow, Gosowong and Cadia Hill deposits, as well as Monte Ollasteddu and Biely Vrch. He joined EMED in 2006 and became MD of KEFI in November 2006 and exploration director in October 2014. He is a member of the Australasian Institute of Mining & Metallurgy and of the Society of Economic Geologists.	John Leach has over 25 years' experience in senior executive positions in the mining industry internationally. He holds a BA (economics) degree and an MBA. He is a member of the Institute of Chartered Accountants (Australia), a member of the Canadian Institute of Chartered Accountants and a fellow of the Australian Institute of Directors.

Principal shareholders	(%)
Hargreaves Lansdown Asset Management	20.80%
Interactive Investor Trading	14.02%
RAB Capital	12.01%
Barclays	7.14%
Halifax Share Dealing	6.37%
AJ Bell Securities	4.35%
Interactive Brokers	2.78%